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09/098,997	06/17/1998	CÁRLOS GONZALEZ OCHOA	VALENZ-98-27	4745

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EXAMINER

BROWN, RUEBEN M

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 02/20/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/098,997

Applicant(s)

OCHOA, CARLOS GONZALEZ

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 17,22 and 28-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 17,22 and 28-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. In particular, Wagner is now relied upon to teach the recited feature of transmitting data within scan lines of a video image or spectrum, which is different from using the VBI of video signal, col. 6, lines 51-64. Wagner teaches that utilizing generally unused video channels is desirable.

Thus one of ordinary skill in the art at the time the invention was made, would have been motivated to transmit any data that disclosed to be embedded in the VBI, alternatively within the viewable range of scan lines, as disclosed by Wagner. One would at least be motivated to do so in order to take advantage of the known higher bandwidth available in a regular TV channel spectrum as opposed to merely using the VBI. This well-known technique and corresponding advantages are also clearly discussed by Campbell & Thomas.

As for applicant's arguments that Sprague does not teach transmitting the security key information in the video image spectrum, again Wagner is relied upon to teach transmitting any data in the video image spectrum.

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*Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman, (U.S. Pat # 6,125,259), in view of Collings, (U.S. Pat # 5,828,402) and Wagner, (U.S. Pat # 5,761,602).

Considering amended claim 17, the claimed remote unitary module (RM) for controlling access to a plurality of video channels that are distributed over a communications network, reads on the operation of the video blocking apparatus, set-top converter 507, STC shown in Fig. 4 of Perlman. The claimed communications network that has a head-end and at least one remote-end, such that the RM is positioned at the remote-end of the communications network, and is provided with a changeable list of permitted video channel numbers also reads on the disclosure of Perlman. The instant reference teaches that the parental control circuitry is located at the user premise, and to which the user is enabled to choose a list of channels permitted to be viewed; see col. 3, lines 51-60; col. 4, lines 5-20; col. 6, lines 9-15 & col. 9, lines 7-15.

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The claimed RM comprising a first tuner in electronic communication with the communications network is met by the operation of the tuner in conjunction with the STC 507, see col. 6, lines 25-37. As for the baseband output associated with a particular video channel number, Perlman delivers TV signals to a TV set, when the blocking apparatus is included within a STC 507, see col. 6, lines 9-30 & Fig. 1. The claimed means for changing the first tuner to receive a different video channel having a different channel number is necessarily included in Perlman, in that the user is enabled to select a variety of TV channels. The additionally claimed CPU that senses that the tuner is tuned to a different channel number and determining whether the different channel number is in the changeable list is met by the operation of the microprocessor 301, which controls the circuitry; see col. 6, lines 30-33.

As for the claimed feature of switching between a digital image stored in RAM and the baseband video signal, Perlman merely teaches switching to another channel that is authorized, Fig. 2 (Step 206, 208). Nevertheless, Collings teaches that when the video signal is being blocked, an alternate video signal containing a graphic image may be displayed to the viewer, see col. 3, line 67 thru col. 4, lines 1-10, which reads on the claimed feature. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Perlman with the technique of switching to a graphic image, if a video channel is blocked, at least for the desirable advantage of informing the subscriber that the requested video channel has been blocked, as taught by Collings.

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Regarding the amended claimed feature of the changeable list containing at least one permitted video channel number; see Perlman col. 3, lines 51-60. As for the additionally claimed feature of the transmitting the changeable list of permitted channels on at least one scan line of a video signal, Perlman discloses that the EPG data may be transmitted on an out-of-band channel, col. 6, lines 49-65. However, it is not explicitly disclosed that the out-of-band channel is a video channel. Nevertheless, Wagner teaches the advantages of using at least a portion of a full video channel to transmit data; see col. 3, lines 45-60 & col. 6, lines 52-64.

It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Perlman & Collings with the technique of transmitting data over at least one scan line of a video spectrum, at least for the desirable benefit of utilizing channels that may be otherwise wasted, as taught by Wagner. Thus the further claimed feature of extracting from the at least one scan line, the embedded portion of changeable list of permitted channels is met by the combination of Perlman & Wagner.

As for the further recited feature, Perlman is directed to prohibiting the display of video channels not included within the list of permitted channels, col. 3, lines 51-67.

4. Claims 22, 28-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman, Collings & Wagner, and further in view of Sprague, (U.S. Pat. # 5,247,575).

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Considering claims 22, 28 & 37, even though the combination of Perlman & Collings teaches transmitting authorization codes to a user premise, enabling reception of certain channels/programs, the instant references do not explicitly discuss assigning an individual security key code to each of a plurality of RM. Nevertheless, Sprague, which is directed to transmitting authorization data to subscribers in a video distribution system, teaches each user maintaining a unique key code that enables decoding of authorized material addressed to the instant subscriber, col. 9, lines 40-54. In order to decode appropriate authorization data, the terminal's encryption/decryption key code is compared with the authentication contained within the transmitted access control data. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Perlman & Collings with the feature of using individual security key codes for each user terminal, for the additional purpose of a securely authenticating user terminals, thereby ensuring that only the appropriate user terminals receive and store authorization data, as taught by Sprague.

Sprague also teaches that security code data, as well as authorization data may be transmitted within the VBI of a TV signal, see col. 9, lines 38-41. Hence, the further claimed feature of determining a local security key code for the RM, wherein the broadcast video image is received, extracting from the VBI any values representative of individual security key codes also reads on the disclosure of Sprague, col. 9, lines 58-65. Moreover, Sprague also teaches comparing the extracted security key from the VBI of a TV signal.

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Nevertheless, as pointed out above, Wagner teaches that data which is generally transmitted using the VBI of video signal, may optionally be delivered on the main video channel spectrum, col. 6 lines 51-64.

As for the additionally claimed feature of identifying at least one of a plurality of RM for receiving a changed list of permitted video channels, the recited feature reads on the disclosure of Perlman that the user terminal's scrambler module 309 receives authorization status codes of all channels that *are receivable* by the user terminal, col. 8, lines 25-40. These authorization codes define, i.e. list the channels that are permitted for viewing by each individual subscriber.

Regarding the claimed feature of transmitting the changed list of programs over predetermined scan lines, such as a first scan line as recited in claim 28, Official Notice is taken that at the time the invention was made, it was known in the art to detect any particular scan line of a video image. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to operate the combination of references in a manner, in which the first scan line of the video is detected, at least as a way to synchronize the reception of embedded data.

Finally, the claimed feature of determining whether a newly selected channel is among the list of permitted channels, and if so displaying the video program or displaying a different video channel is met by the operation of Perlman, (col. 10, lines 12-48).



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Considering claim 29, the claimed non-visible scan line reads on using the VBI, disclosed in Sprague.

Considering claim 30, the claimed elements of remote unitary module, which corresponds with subject matter mentioned above in the rejection of claims 17 & 22, are likewise analyzed. The additional claimed feature of the first tuner being configurable to accept at least two channels of video and switchably receiving a selected one of the two channels of video is necessarily included in the operation of Perlman.

The claimed video controller reads on the operation of the Close Caption and OSD device 60, of Collings, (col. 8, line 67 thru col. 9, lines 1-4 & col. 11, lines 50-64).

Considering claim 31, the claimed feature of a switchable tuner is included in Perlman (col. 6, lines 30-42).

Considering claim 32, see Collings, (col. 8, line 67 thru col. 9, lines 1-4 & col. 11, lines 50-64).

Considering claim 33, the STC 507 of Perlman & apparatus 20 of Collings necessarily transmit baseband video to a TV set.

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Considering claims 34 & 36, the RF modulator 39 in Collings modulates all video signals on the same frequency, either channel 3 or channel 4.

Considering claim 35, the claimed video display device reads on the TV set 22 of Collings.

Considering claim 38, it would have been obvious for one of ordinary skill in the art at the time the invention was made, to embed as much information as possible on a single scan line, at least for the desirable purpose of reducing the encoding and decoding time, when multiple scan lines are used.

Considering claim 39, non-visible scan lines reads on the VBI, disclosed in Sprague.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's claims.

A) Campbell Teaches that it is desirable to use the full or a portion of a video channel to transmit command or control data, such as improved throughput; see col. 2, lines 31-45 & col. 4, lines 63-65.

B) Thomas Teaches transmitting data in a full field video channel, col. 3, lines 45-67.

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

**Or:**

(703) 746-6861 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")


*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399.  
The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the  
organization where this application or proceeding is assigned is (703) 872-9314 for regular  
communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown

  
ANDREW FAILE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600